

6 March 2001
SLAAP

EPA

Name

org

Phone

Sandy Clayton
Regional Office

ANCOM

256 313 1718

EPA - Superfund

913 551-7468

ABTD/PCB Program

913-551-7576

Ralph Fyfe
Dan Mroz

US Army Corps of Engineers

816-983-3368

Eugene M. Evans

USEPA

913/551-7731

David Phillipini

USEPA

913/551-7395

Kurt Baer

USACE

816/983-3922

David Daniel

USACE

816/983-3910

Heather Black

SEMCOR

256-313-1710

Greg Wallace

Arrowhead

913-814-9999

40330684



Superfund



St. Louis Army Ammunition Plant



AMCOM Goals

1. Remove the Notice of Noncompliance (NON)
2. Facilitate the Real Estate Transfer of SLAAP



Summary of NON

Notice of Noncompliance, TSCA Docket Number VII-91-T-304

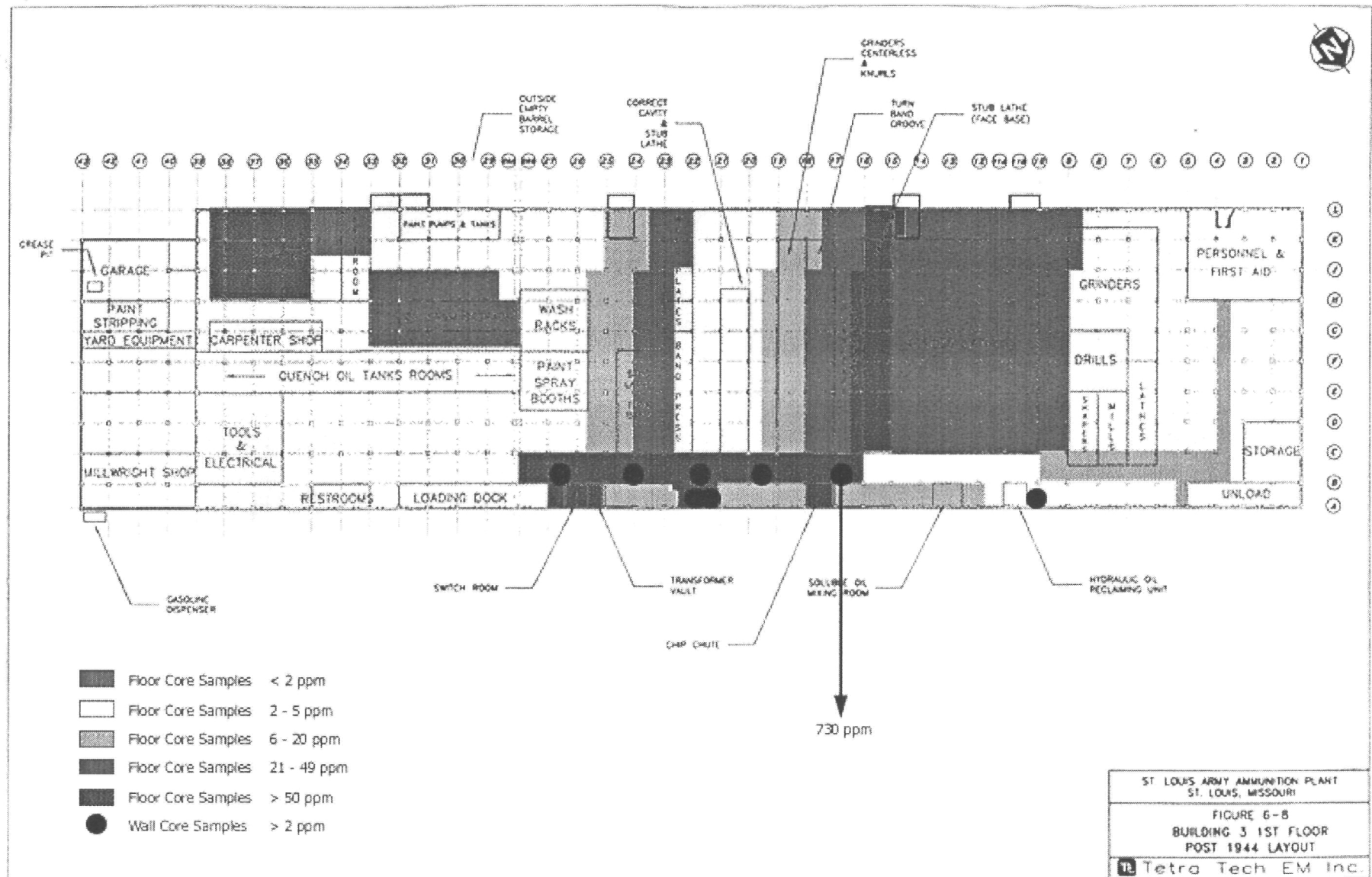
Violations:

- Removal of PCBs from facility is not in compliance with the National Spill Clean-Up Policy (40 CFR 761-125)
- Nine of sixteen samples revealed PCB levels greater than clean-up standard

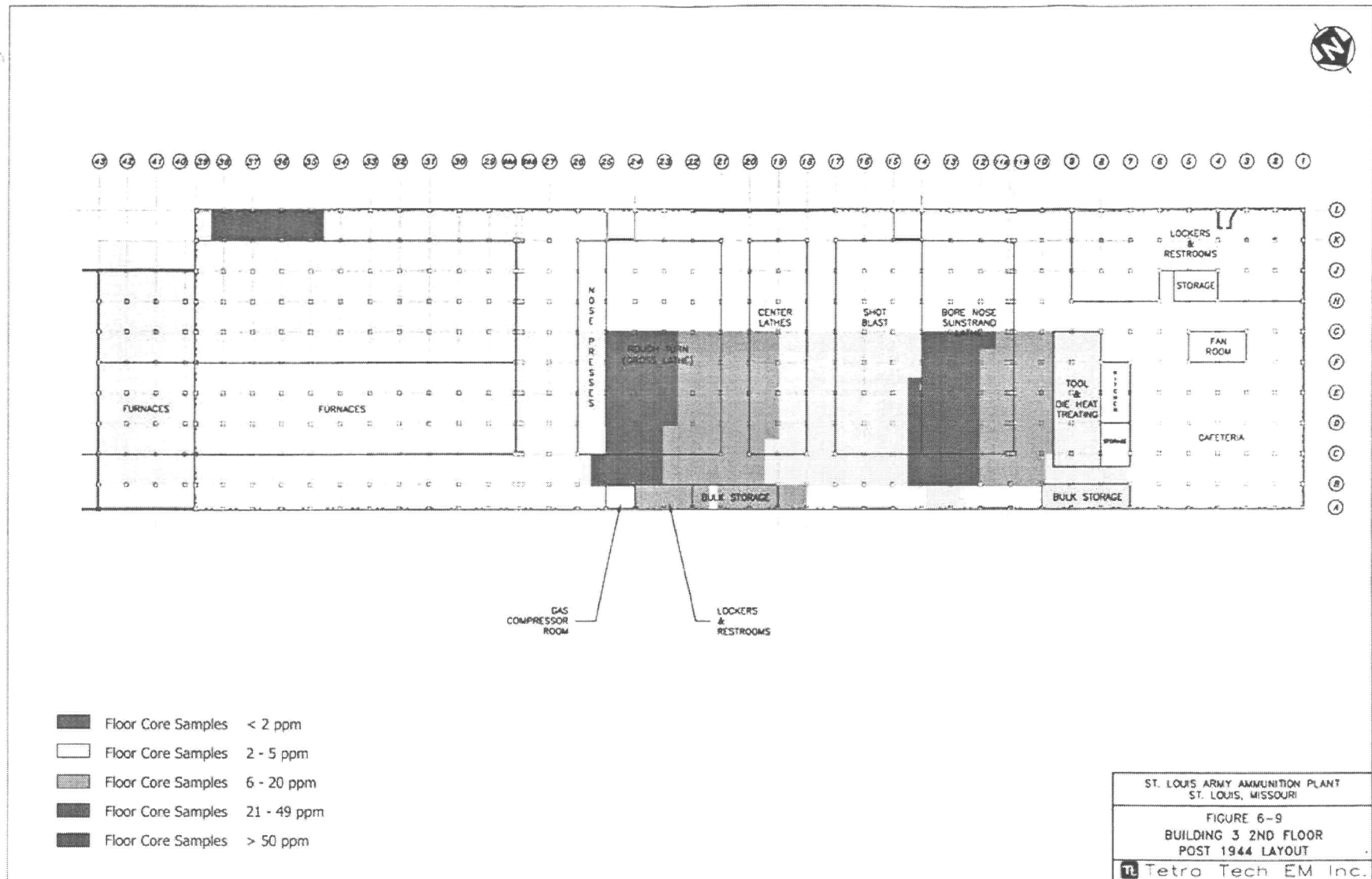
EPA requirements:

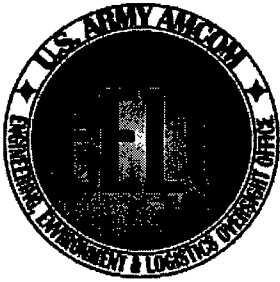
- ✓ Evidence of the removal and proper disposal of all contaminated mastic and wood from both floors of Building 3
- ✓ Evidence of the removal and proper disposal of all contaminated plastic and fiberboard from the file storage area
- ✓ Decontamination of all non-porous surfaces to less than 10 μ g per 100cm² and verification by post decontamination wipe sampling
- Decontamination of all porous surfaces (concrete) to less than 10 ppm PCBs as determined by core sampling (samples indicate elevated levels of PCBs remain in the chip chute area only)
- ✓ work completed

First Floor PCB Concentrations in Concrete (based on 1994 data)



Second Floor PCB Concentrations in Concrete (based on 1994 data)





Notice of Noncompliance (NON) Related Work

Sep 91 – Aug 94 – Chemical Waste Management decontaminated and tested interior surfaces on the first and second floors, removed wood block and flooring from the first and second floors and removed potential contaminated mechanical equipment from the roof of building 3. After decontamination, sampling results revealed that portions of building 3 still contained elevated PCB concentrations.

Sep 95 – Environmental and Extraction Technologies decontaminated a 600 square foot area of PCBs.

1996 – Woodward-Clyde Health Based Risk Assessment concluded no further remediation was required.

1996 – Agency for Toxic Substances and Disease Registry evaluated the Woodward-Clyde Health Based Risk Assessment and determined it was not representative of the conditions in Building 3.

1997 – DKW construction applied four inches of concrete on the first and second floors of building 3 and painted the walls and ceilings. This was completed in early 1998.



Regulatory Driver

- ❑ Previous remediation work conducted prior to new PCB regulations
- ❑ 1998 Toxic Substances Control Act (TSCA) Amendments, “Mega Rule”, apply new, more stringent, cleanup criteria (less than 1 ppm)*

* Or a comprehensive risk assessment. Risk assessment is unlikely to be approved by EPA Headquarters since there is no precedent for approving a risk assessment for this type of contamination.



Alternatives Study

- ❑ Army reviewed the possible alternatives in an attempt to resolve the NON without negatively impacting the property transfer process

- ❑ Conducted mini-feasibility study in 2001 to determine cost and effectiveness of five different scenarios



Comparison of Alternatives

| Alternative | Facilitates Building Transfer | Removes NON | Cost |
|--|-------------------------------|---|------------------------|
| No Action | No | No | \$0 |
| Remove PCB contamination exceeding 50 ppm- Phase I | Possibly | Possibly (contingent on Army's intent and EPA approval) | \$1.2M-phase I |
| Remove remaining building - Phase II | Yes | Yes | \$6.4M-phase II |
| Remove PCB contamination exceeding the risk-based criteria (requires EPA approval) | Yes | Yes (contingent on EPA approval) | \$3.5M |
| Demolish the Building | Yes | Yes | \$7.6M |
| Repair Flooring Cracks and Apply Epoxy Coating | No | Yes | \$1M |



Preferred Alternative

Alternative #2 - Removal of PCB-Contaminated Material Exceeding 50 ppm - Phase I

- ❑ Offers a high degree of technical feasibility, implementability, and constructability
- ❑ Results in possible removal of the NON (with commitment by AMCOM for further removal action) and allows for the transfer of the property to a non-DoD entity
- ❑ Lowest cost to the Army of the alternatives that provide for possible removal of the NON without negatively effecting the eventual property transfer



Areas of Uncertainty

- ❑ Letter of commitment from AMCOM to EPA stating that AMCOM intends to continue to remove the contaminated concrete will likely result in removal of the NON.
- ❑ The estimates of extent and volume of the PCB contamination are based on limited data and therefore are subject to change. This may impact the cost estimates.
- ❑ Army attorneys are in discussions to determine regulations that will control transfer of property (CERCLA vs. TSCA).



Notice of Noncompliance (NON) Related Funding

Current funds available to perform concrete removal for building 3: \$1.5 million

Funding required in the future to continue to remove contaminated concrete: \$6.4 million + additional funds for possible contamination under the building (may be able to negotiate a reduced selling price for property in exchange for continued remediation by buyer)



Tentative Schedule for NON Removal

| | Target Date | Completion Date |
|--|-------------|-----------------|
| NON Contract Awarded | | 01 Oct 00 |
| Building 3 risk assessment begin | | 22 Jan 01 |
| Meeting with EPA and COE on NON resolution | | 06 Mar 01 |
| CG decision on direction for NON | 26 Apr 01 | |
| Sampling and analysis plan for bldg 3 due | 30 Apr 01 | |
| Submit risk assessment to EPA HQ | 30 Apr 01 | |
| Send letter of intent to EPA re NON | 11 May 01 | |
| Regulator review of sampling plan | 30 May 01 | |
| Sampling work begin (building 3) | 19 Jun 01 | |
| Sampling results (building 3) | 30 Jul 01 | |
| Draft remediation plan (building 3) | 17 Aug 01 | |
| Regulator review of remediation plan | 17 Sep 01 | |
| Incorporate comments/revise plan | 01 Oct 01 | |
| Begin building 3 remediation | 12 Nov 01 | |
| Final PCB remediation report | 12 Mar 02 | |



Recommendations

- ☐ Approve preferred action
- ☐ Sign letter of commitment to EPA requesting removal of NON



Goal 2

Facilitate real estate transfer of SLAAP



Summary of Contaminants from EBS Results

Sitewide Concerns:

Lead-based paint, asbestos containing materials and PCB-containing fluorescent light ballasts

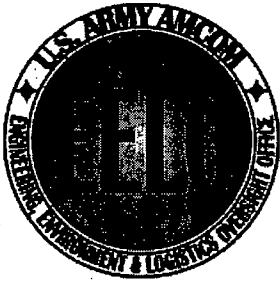
PCB contamination:

Widespread PCB contamination - Building 3 concrete contamination

Localized PCB contamination - Oil stain from electrical equipment (building 1, 4 and 5) and soil sample in building 2

Other contaminants of concern:

- Lead, chromium, benzo(a)pyrene, semi-volatile organic compounds and volatile organic compounds in soil samples
- Antimony and lead in sump water samples
- 1,1-dichloroethene in groundwater sample
- Pesticides detected in air sampling



Funding for Remedial Investigation

Current funds available to perform remedial investigation
at SLAAP: \$400K

Funding required for further remedial work will depend
on the results of the investigation.



Tentative Schedule for Property Transfer

| | Target Date | Completion Date |
|--|-------------------------|-----------------|
| Revised EBS to Regulators | | 29 Dec 00 |
| Comments from MDNR on EBS | | 04 Apr 01 |
| Comments from EPA on EBS | | 11 Apr 01 |
| GSA final appraisal | 01 May 01 | |
| RI work plan begin (funded) | 17 May 01 | |
| RI work plan complete | 30 Aug 01 | |
| RI field work begin (FY01 funding req'd) | 01 Nov 01 | |
| Begin concrete removal in building 3 | 12 Nov 01 | |
| RI field work end | 01 Dec 01 | |
| Final PCB remediation report | 12 Mar 02 | |
| Evaluate results of RI field work | Jun 02 | |
| Develop Feasibility Study † | Dec 02 | |
| Implement Remedial Action † | continuous after Jun 02 | |
| Transfer to GSA | TBD* | |

† dependent on RI results

* depending on the results of the RI, may be able to proceed with an early transfer